

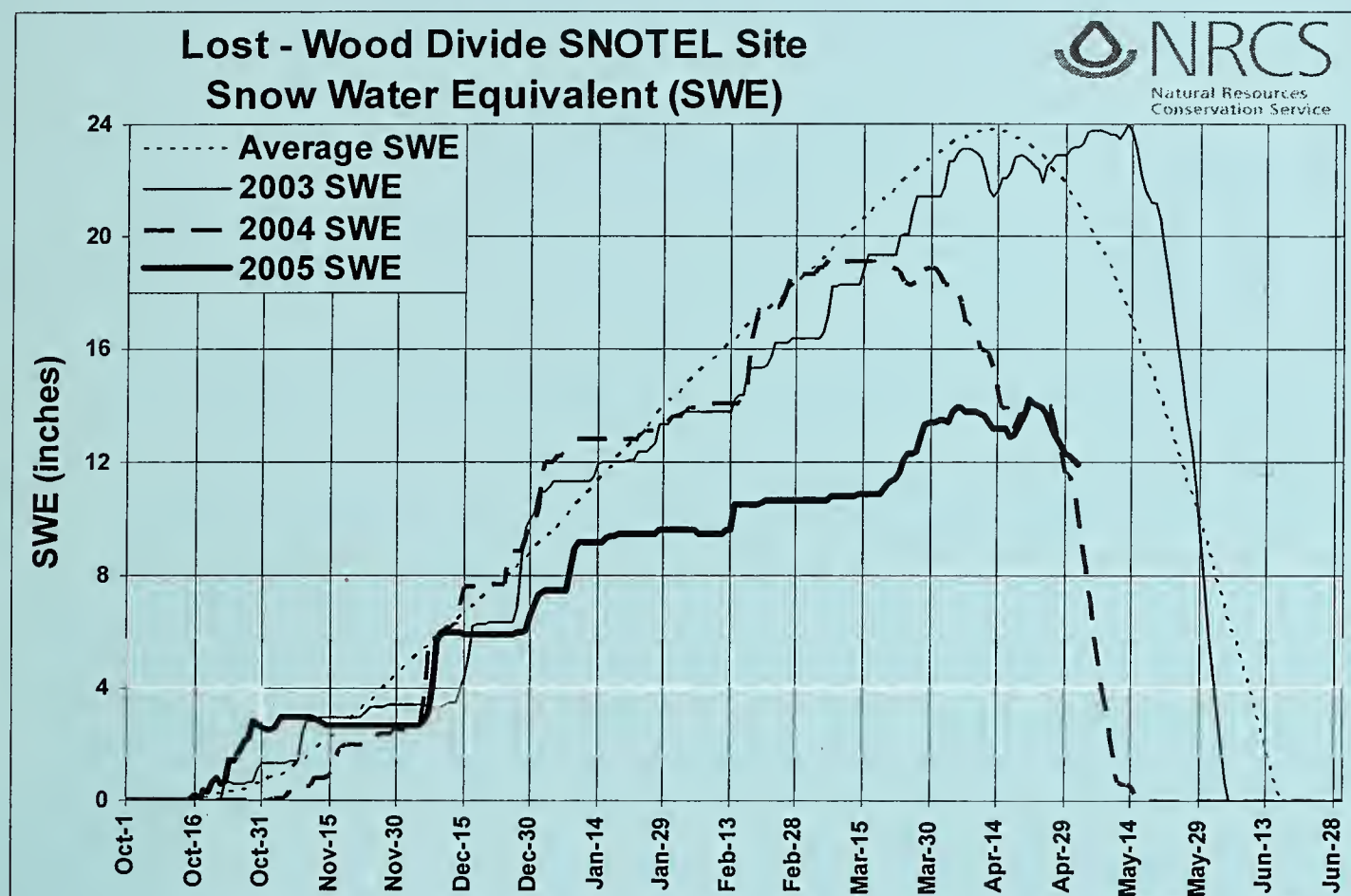
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United States Department of Agriculture
Natural Resources Conservation Service

Idaho Water Supply Outlook Report May 1, 2005



Lost-Wood Divide SNOTEL site is located in central Idaho on the divide of the Big Lost and Big Wood river basins at 7,900 feet elevation. This graph shows that the 2005 snow water equivalent (swe) is higher than last year at this time, but still has only peaked at 14.2 inches of water compared to 19.1 inches in 2004, and 24.0 inches in 2003. The current peak swe is also nearly a full 10 inches lower than the 1971-2000 average swe of 24.0". In 2004, Lost-Wood SNOTEL site peaked early on March 7th and melted out early on May 16th because Idaho experienced unusually warm temperatures and the driest March-April period on record. In contrast, 2003 was an extremely cool, wet spring and this site did not peak until over a full two months later on May 13th, and did not melt out until June 5th. This year, Idaho is having relatively cool, wet weather since mid-March and spring conditions are somewhere between the conditions of 2003 and 2004. This site normally melts out in mid-June and this year it looks like it may melt around mid- to late May, depending on future weather conditions. Although, the current 2005 peak is considerably lower than last year, the current swe is higher than it was last year at this time. **This shows the importance of spring temperatures and precipitation to our streamflow and water supply forecasts. The cool, wet weather is helping to preserve the snowpack, delay runoff, and extend water supplies for use later in the summer. This spring has not been as beneficial as 2003 yet, but has definitely helped reduce the severity of drought conditions.**

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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Idaho Water Supply Outlook Report

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The Idaho Water Supply Outlook Report is published and distributed as a public service by the USDA, Natural Resources Conservation Service from January to May each year. The June report is not mailed to recipients and is available via the Internet. In order to maintain current mailing information, control the cost of this publication and ensure maximum use of the information, we are required to examine our circulation annually. This notice is required by the congressional joint committee for the annual revision of free mailing lists.

The Idaho Water Supply Outlook Report is available on the Internet at <http://www.id.nrcs.usda.gov/snow/> and allows you to obtain the Water Supply Outlook Report several days before you receive it in the mail. Additional water supply products and most current snowpack information are also available on the Internet.

You do not need to return this form if everything is current and correct --- you did not change any requested basins or boxes checked below, and you want to remain on mailings for next year.

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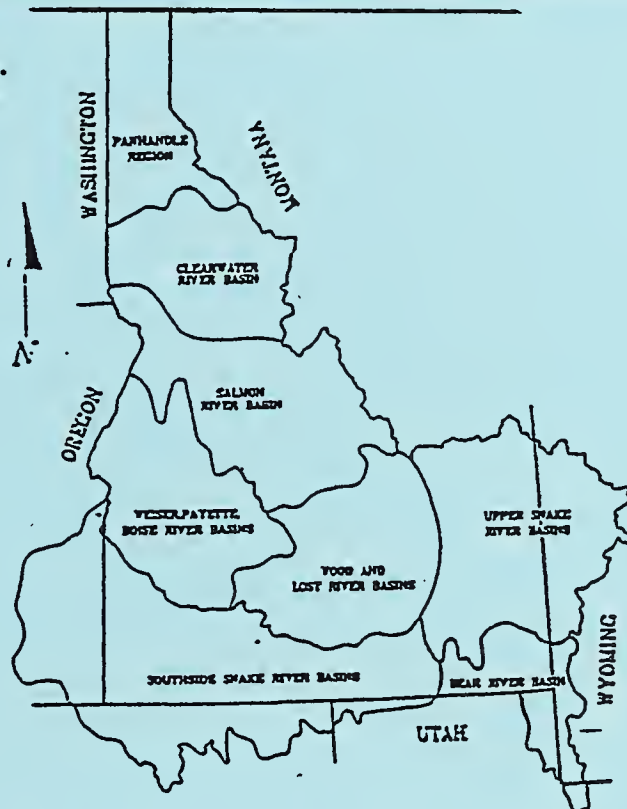
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- ☐ #4 - Weiser, Payette, Boise River Basins
- ☐ #5 - Wood and Lost River Basins
- ☐ #6 - Upper Snake River Basin
- ☐ #7 - Southside Snake River Basins
- ☐ #8 - Bear River Basin

☐ - Annual Data Summary Report - published after each water year: contains individual snow course measurements, snow water equivalent and precipitation data from SNOTEL (SNOW TELemetry) stations, and the 1971-2000 averages.

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IDAHO WATER SUPPLY OUTLOOK REPORT

May 1, 2005

SUMMARY

Relatively cool, wet weather since mid-March has extended summer water supplies by bringing moisture to the state and preserving high elevation snow. This has left Idaho water users in better shape than they were a month ago. Idaho has received another near normal month of precipitation across most of the central and southern part of the state. The Panhandle Region and Upper Snake basin, which really needed it the most, received the lowest precipitation amounts in the state at 72% of average. Whereas, southern Idaho continued to get hit the hardest with the Southside Snake river basins receiving 171% of average. Water year to date precipitation amounts range from a low of 64% of average in the Salmon, Weiser, Payette and Boise river basins to 103% in the Bear River basin. Near record low snowpacks of 50% of average still dominate northern Idaho whereas snowpacks in central and eastern Idaho are 50-70% of average. Snowpacks in southern Idaho are better off at 85-100% of average. However, due to well below average precipitation and snowfall all winter, the water supply outlook in Idaho remains dismal. Most snowpacks are well over 100% of last year because last March and April were so dry that snowpacks melted early; however, this year's snowpacks peaked well below last year's peaks and are melting out later due to the wet, cool spring that Idaho has experienced so far.

Streamflow forecasts for most Idaho drainages have remained steady from last month in the 35-65% of average range with the exception of the headwaters of the Bear River basin, which are forecast at over 100% of average and Magic Reservoir inflow at 26%. Drought conditions will persist in Idaho and expand into the northern part of the state. Unsettled weather is predicted for early May and will hopefully continue throughout this month because it is critical to preserve the little water left in high elevation snowpacks for later use this summer. The problem is there was not much snow water to preserve in the first place due to the low winter snowfall. Additional spring rains before the soils start to dry will provide a much needed boost to the water supplies, but a return to warm, dry conditions would kick the runoff season into high gear and also shorten the supply of this limited natural resource. Hopefully, the predicted streamflows and timely summer rains will allow water users to squeeze through one more season of drought.

SNOWPACK

Snowpack percent of averages have not changed much over the last month due to the relatively cool, wet April. High elevation snowpacks contain most of the water and nearly all low, and some mid-elevation snowpacks have melted out, or will soon. Most snowpacks are greater than last year at this time due to the early melt-season last spring caused by the record warm and dry March-April period. This year, Idaho snowpacks may be melting a little later due to cooler weather, but most snowpacks still peaked well below the average seasonal peak of snow water equivalent. Most snowpacks in northern, central and eastern Idaho remain in the 50-70% of average range, whereas the southern parts of the state are in the 80-100% range. The lowest snowpacks in the state are in the Panhandle Region, and are reporting the third lowest May 1 snow levels since 1961. Coeur d'Alene basin is only 29% of average. The highest snowpacks are in the Bear River, Oakley and Bruneau basins at 100% of average.

PRECIPITATION

April picked up where March left off with some much needed moisture. The Panhandle, Clearwater, Salmon, Weiser, Payette, Boise and Upper Snake basins all received 70-90% of average for the month of April. However, once again the southern part of the state got hit the hardest as the Southside Snake River basins received 171% of average and the Bear River basin received 107% of average. The Wood and Lost River basins also did well with 99% of average precipitation. Precipitation for the current water year ranges from 64% of average in the Salmon, Weiser, Payette and Boise river basins to 103% in the Bear River basin. The relatively cool, wet March and April is the opposite of last year when we had the driest March and April on record.

RESERVOIRS

Reservoir storages have increased as most of the low, and mid-elevation snowpacks are melting or have melted out. Storage levels remain below average across most of the state and are similar to the past few years due to below normal streamflows since the summer of 2000. Northern Idaho reservoirs are storing as much water as possible because of lack of snow this year. Dworshak Reservoir is nearly full at 96% of capacity, 137% of average. The cumulative drought effects are most evident in the southern and central part of the state. On the low end, Magic Reservoir is only 29% full, 37% of average, Salmon Falls Reservoir is 22% full and 45% of average, and Bear Lake bottoms out at 17% capacity, 25% of average. On the high end, Brownlee Reservoir remains a bright spot in southern Idaho and is 98% full, 130% of average and Little Wood Reservoir is 96% full, 118% of average. In the Upper Snake reservoir system, Jackson Lake is only 24% full, 43% of average and Palisades Reservoir is 61% of capacity, 98% of average.

Note: NRCS reports reservoir information in terms of usable volumes, which includes both active, inactive and in some cases, dead storage. Other operators may report reservoir contents in different terms. For additional information, see the reservoir definitions in this report.

STREAMFLOW

Another month of near normal precipitation stabilized streamflow forecasts and actually increased forecasts in the southern part of the state. A relatively cool, wet April served to maintain streamflow forecasts at the 35-65% of average range for the May-September period across most of the state. The Panhandle Region is forecast at 40-65% of average and the Clearwater and Salmon River basins increased slightly to 55-60% of average. The Upper Snake River basin is in the 40-70% of average range and the forecasts for the high desert streams south of the Snake River range from 37% of average at Hells Canyon Dam to 80% for Bruneau River and Salmon Falls Creek. The Wood and Lost River basins remain at 25-60% of average, whereas the Weiser, Payette, and Boise basins' forecasts remain in the 40-60% of average range. Camas Creek near Blaine and Big Wood River below Magic are the lowest forecast in the state at 25% of average, while the Bear River basin continues to boast some of the highest streamflow forecasts in the state. The headwater streams of the Bear are forecast at 110% of average and decrease downstream to 48% for the Bear River at Stewart Dam because of the cumulative drought. Because of the deteriorating weather conditions in this critical season, our streamflow forecasts will be updated in mid-May on our Water Supply web page:

<http://www.id.nrcs.usda.gov/snow/watersupply/>

The forecast numbers mentioned in the narrative are the volume under the 50% Chance of Exceeding, which means there is a 50% chance the volume will be greater or less than the given value. Due to the last five years of drought conditions, water users should consider using a lesser exceedance forecast to reduce the risk of coming up short on water, especially in the Wood and Lost. There is still enough snow in most basins to produce additional snowmelt streamflow peaks. In low snow years like this, rain generated streamflow peaks may often exceed snowmelt generated peaks. The potential for these rain driven streamflow peaks remains until the soils start to dry out during the summer season. Streamflow forecasts are not looking good at this point, however, the cool, wet spring experienced so far is helping to preserve the high elevation snowpacks, delay irrigation demands which extends water supplies, and reduces severity of drought conditions.

RECREATION

'Mud season' has officially begun and is distinguished by the transition from skis and snowmobiles to hiking boots and ATV's. Rivers in southern Idaho are flirting with their peak flows and river runners should be aware that high elevation snowpacks are turning over and ready to melt. All it will take is a short stint of warm weather and the water stored in these ripe mountain snowpacks should start moving and hitting the rivers. Fishermen and boaters have to be happy with the cool and wet weather that March and April have brought to Idaho. The recent precipitation and cooler temperatures have delayed spring runoff and the inevitable low summer flows. Hopefully, the cool, wet weather will continue throughout the spring and the short-term forecast for early May is looking good as of now. However, do not be deceived, a large water deficit still exists up in the mountains and cumulative drought effects still persist. Therefore, river runners should be ready and can still expect a relatively short high water season.

SNOW SURVEY AND WATER SUPPLY INFORMATIONAL MEETING

Friends of the Teton River and the Teton Soil Conservation District will host a presentation by Ron Abramovich, Idaho Water Supply Specialist, and Tom Perkins, Columbia River Forecaster, from the Natural Resources Conservation Service Snow Survey program, on Wednesday, May 18, 2005 at 7:00 PM at Teton High School in Driggs. Abramovich will discuss how local snow surveyors collect snow data at automated and manually measured snow stations and how the data are used to predict this year's water supply. Ron will also discuss how this year's data compares to historic snowpack and streamflow data in the Teton and Upper Snake River Basins. Please contact FTR with questions at 208-354-3871 or Penny at the NRCS, 208-354-2680 ext. 3

NRCS SNOW SURVEY DATA AND WATER SUPPLY USERS

During the first two weeks of March, April and May of 2005 the Snow Survey and Water Supply Forecasting Program will be asking for volunteers to provide feedback on Customer Satisfaction. At the NRCS National Water and Climate Center web site a small window will appear asking if you would like to participate in a Satisfaction Survey, or you can volunteer for the survey at <http://www.wcc.nrcs.usda.gov> Thanks for considering participation.

IDAHO SURFACE WATER SUPPLY INDEX (SWSI)*As of May 1, 2005*

The Surface Water Supply Index (SWSI) is a predictive indicator of surface water availability within a watershed for the spring and summer water use season. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow. SWSI values are scaled from +4.0 (abundant supply) to -4.0 (extremely dry), with a value of zero indicating a median water supply as compared to historical occurrences. The SWSI analysis period is from 1971 to present.

SWSI values provide a more comprehensive outlook of water availability by combining streamflow forecasts and reservoir storage where appropriate. The SWSI index allows comparison of water availability between basins for drought or flood severity analysis. Threshold SWSI values have been determined for some basins to indicate the potential for agricultural irrigation water shortages.

<i>BASIN or REGION</i>	<i>SWSI Value</i>	<i>Most Recent Year With Similar SWSI Value</i>	<i>Agricultural Water Supply Shortage May Occur When SWSI is Less Than</i>
PANHANDLE	-3.2	----	NA
CLEARWATER	-2.3	2000	NA
SALMON	-2.1	2004	NA
WEISER	-2.6	1990/94	NA
PAYETTE	-2.6	1991/88	NA
BOISE	-2.6	1987	-2.1
BIG WOOD	-2.8	2004	-1.0
LITTLE WOOD	-0.9	1985	-2.0
BIG LOST	-1.5	2003	-0.5
LITTLE LOST	-2.7	2003	0.0
HENRYS FORK	-2.6	1987	-3.3
SNAKE (HEISE)	-3.6	2002	-2.0
OAKLEY	-1.4	1981/87	-1.0
SALMON FALLS	-1.9	2000/02	-1.0
BRUNEAU	-0.5	1974/85	NA
BEAR RIVER	-3.8	2003/04	-3.8

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION

-4	-3	-2	-1	0	1	2	3	4
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99%	87%	75%	63%	50%	37%	25%	13%	1%

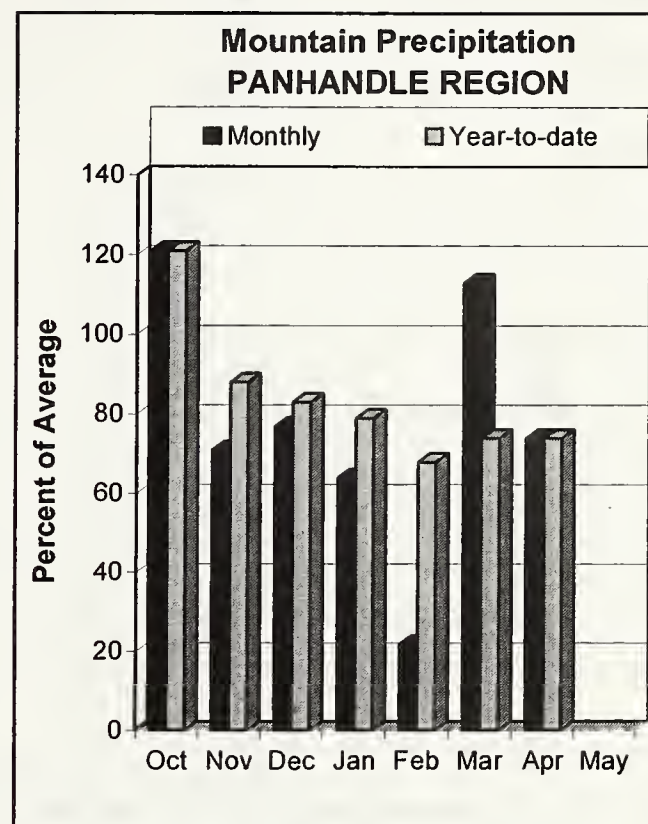
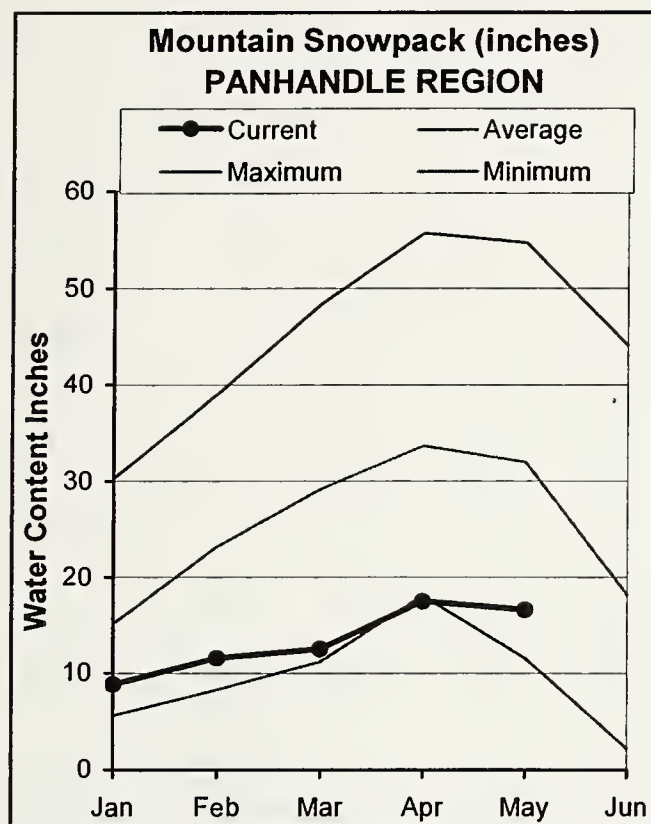
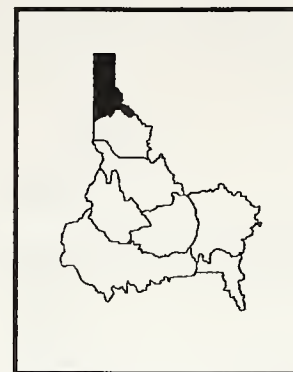
Much	Below	Near Normal			Above	Much		
Below	Normal	Water Supply			Normal	Above		

NA = Not Applicable

Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and less than -3.0, 13% of the time. Half the time, the SWSI will be below and half the time above a value of zero. The interval between -1.5 and +1.5 described as "Near Normal Water Supply," represents three SWSI units and would be expected to occur about one-third (36%) of the time.

PANHANDLE REGION

MAY 1, 2005



WATER SUPPLY OUTLOOK

April precipitation and water year to date precipitation are both 74% of average. The little bit of snow this year has melted in the low elevation basins of Rathdrum and Hayden Lake. Snowpack in Coeur d'Alene basin is 29% of average, and 50% of average in other basins in the Panhandle Region. The May 1 snowpack is the third lowest since 1961, only 1977 and 1994 had less snow than this year. Reservoir storage ranges from 60-80% of their summer storage levels in Pend Oreille, Coeur d'Alene and Priest lakes. Streamflow forecasts are low at 40-50% of average for the Moyie, North Fork Coeur d'Alene, St. Joe and Spokane rivers. Streams forecast at 60-70% of average include: Kootenai, Smith, Boundary, Clark Fork, Pend Oreille and Priest rivers. After a few streamflow peaks from rain in late March and early April, streams quickly returned back to below average levels. April monthly volumes were 76% of average for the St. Joe River at Calder and only 58% for the St. Maries River. Water users should be prepared for low runoff volumes this season, snowmelt streamflow peaks will be nearly non-existent and streams will return to below average levels early and remain below average without favorable rainfall.

PANHANDLE REGION
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
KOOTENAI at Leonia (1,2)	MAY-JUL	3560	4080	4320	70	4560	5080	6170
	MAY-SEP	4240	4820	5090	70	5360	5940	7250
MOYIE RIVER at Eastport	MAY-JUL	125	150	170	52	190	215	330
	MAY-SEP	129	159	179	52	199	229	345
SMITH CREEK	MAY-JUL	44	55	62	60	69	80	104
	MAY-SEP	44	57	65	59	73	86	111
BOUNDARY CREEK	MAY-JUL	44	53	60	59	67	76	102
	MAY-SEP	47	57	64	59	71	81	108
CLARK FK at Whitehorse Rpds (1,2)	MAY-JUL	4080	5320	5890	61	6460	7700	9590
	MAY-SEP	4570	5960	6590	62	7220	8610	10700
PEND OREILLE Lake Inflow (2)	MAY-JUL	4870	5770	6380	60	6990	7890	10600
	MAY-SEP	5440	6440	7120	60	7800	8800	11800
PRIEST near Priest River (1,2)	MAY-JUL	260	335	370	60	405	480	615
	MAY-SEP	270	365	405	60	445	540	670
NF COEUR D'ALENE RIVER AT ENAVILLE	MAY-JUL	138	168	188	43	238	308	440
	MAY-SEP	149	182	205	43	255	330	480
ST. JOE at Calder	MAY-JUL	310	395	450	53	505	590	845
	MAY-SEP	330	415	475	52	535	620	910
SPOKANE near Post Falls (2)	MAY-JUL	536	637	705	42	865	1095	1670
	MAY-SEP	581	688	760	43	925	1165	1770
SPOKANE at Long Lake (2)	MAY-JUL	701	831	920	48	1100	1370	1910
	MAY-SEP	836	981	1080	51	1270	1550	2130

PANHANDLE REGION Reservoir Storage (1000 AF) - End of April					PANHANDLE REGION Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HUNGRY HORSE	3451.0	3125.0	2828.0	1954.8	Kootenai ab Bonners Ferry	33	81	53
FLATHEAD LAKE	1791.0	1457.0	1218.0	931.9	Moyie River	11	96	63
NOXON RAPIDS	335.0	320.3	307.9	272.3	Priest River	4	72	50
PEND OREILLE	1561.3	952.5	934.5	916.7	Pend Oreille River	90	88	56
COEUR D'ALENE	238.5	198.9	156.5	249.7	Rathdrum Creek	1	0	0
PRIEST LAKE	119.3	90.8	101.5	102.5	Hayden Lake	0	0	0
					Coeur d'Alene River	7	40	29
					St. Joe River	4	80	50
					Spokane River	10	51	34
					Palouse River	1	0	0

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

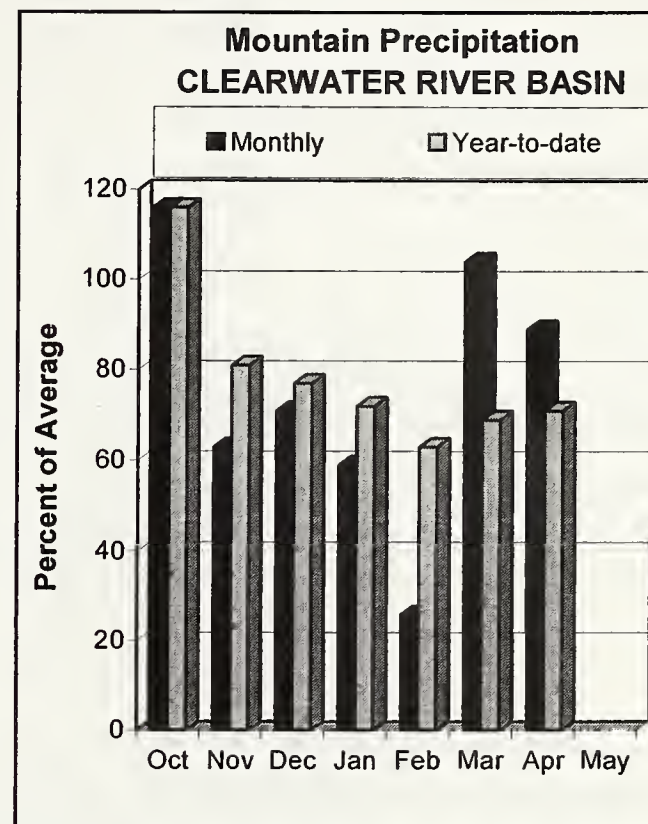
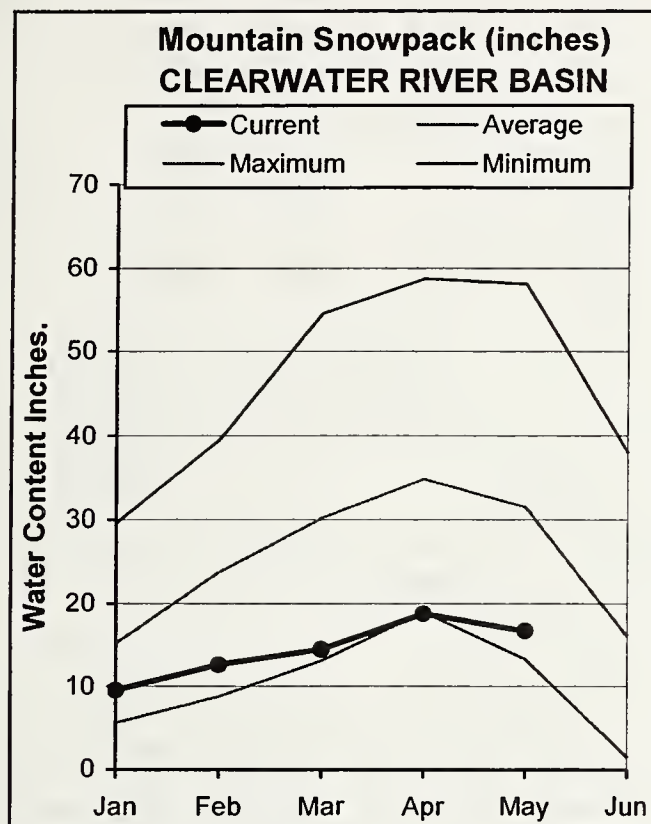
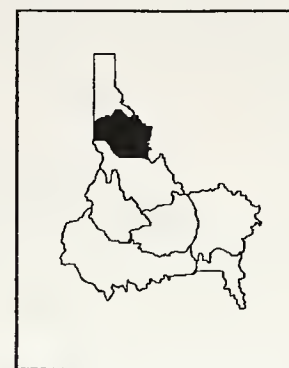
The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

CLEARWATER RIVER BASIN

MAY 1, 2005



WATER SUPPLY OUTLOOK

Precipitation in April was 89% of average and is 71% for the water year. Above average precipitation amounts only fell in October and March this water year so far. The Clearwater basin snowpack remains at near record low levels at 53% of average, fourth lowest since 1961; only 1977, 1987 and 1994 had less snow on May 1. The snowpack is 54% of average in the North Fork Clearwater and Lochsa basins and 49% in the Selway basin. As a result, Dworshak Reservoir is storing more water and is nearly full at 96% of capacity, 137% of average. Storage in Dworshak Reservoir is the second highest April 30 amount, only 1992 had a little more in storage. The Selway and Lochsa rivers are forecast at 60% of average. Dworshak Reservoir inflow and Clearwater River at Spalding are forecast at 56% of average. Based on current reservoir storage and forecasts, surface water supplies should be better than 2001, but not as good as in 2000. Soil moisture conditions are better from the late March and fall rains, but without the high elevation snowpack, streams will have a short high water season. Rain during the snowmelt season and before soils dry, should provide additional peaks before the usual dry summer season arrives. Then streams will return and remain below normal levels for the rest of summer.

CLEARWATER RIVER BASIN
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<===== Drier ===== Future Conditions ===== Wetter =====>						30-Yr Avg. (1000AF)
		===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
SELWAY near Lowell	MAY-JUL	790	930	1020	59	1110	1250	1720
	MAY-SEP	850	1000	1100	60	1200	1350	1830
LOCHSA near Lowell	MAY-JUL	590	675	735	59	795	875	1250
	MAY-SEP	640	730	795	60	860	950	1330
DWORSHAK RESV INFLOW (1,2)	MAY-JUL	600	920	1070	54	1220	1540	1970
	MAY-SEP	665	1010	1160	55	1310	1650	2130
CLEARWATER at Orofino (1)	MAY-JUL	1590	2020	2220	60	2420	2850	3730
	MAY-SEP	1690	2160	2380	60	2600	3070	3990
CLEARWATER at Spalding (1,2)	MAY-JUL	2290	3030	3370	58	3710	4450	5770
	MAY-SEP	2450	3250	3610	58	3970	4770	6190

CLEARWATER RIVER BASIN Reservoir Storage (1000 AF) - End of April					CLEARWATER RIVER BASIN Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of =====	
		This Year	Last Year	Avg			Last Yr	Average
DWORSHAK	3468.0	3326.4	2787.3	2421.3	North Fork Clearwater	8	74	54
					Lochsa River	2	96	54
					Selway River	4	91	49
					Clearwater Basin Total	14	78	53

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

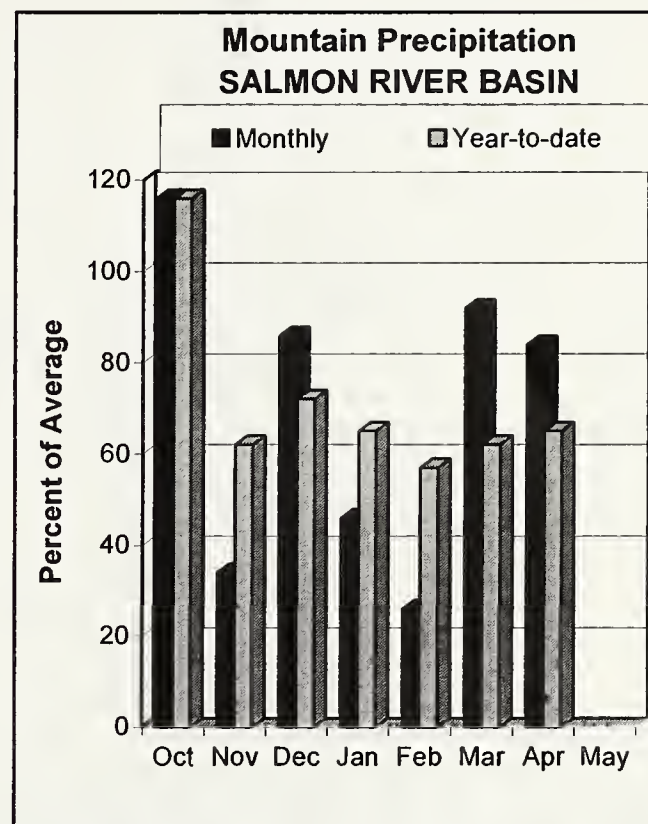
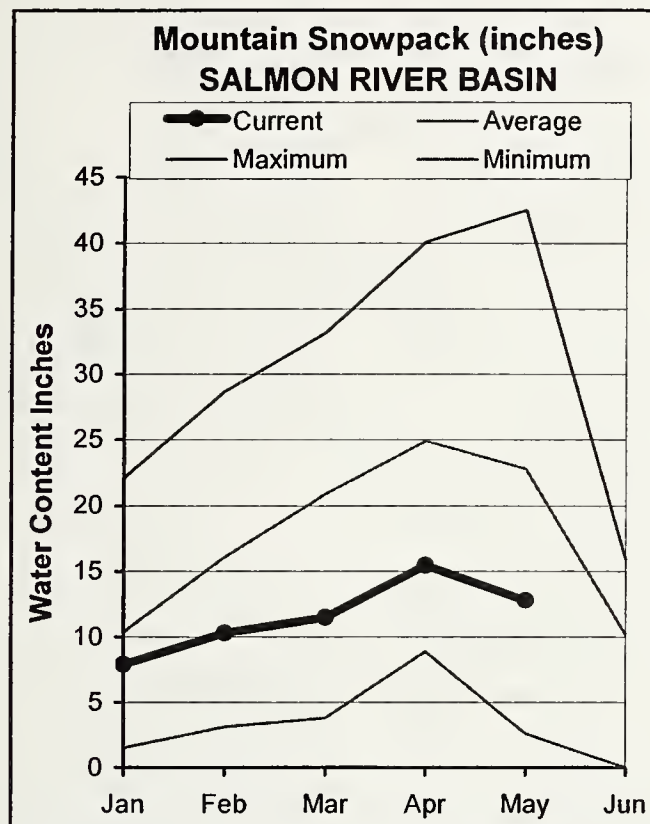
The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

SALMON RIVER BASIN

MAY 1, 2005



WATER SUPPLY OUTLOOK

Precipitation in April was 84% of average and is 65% for the water year, nearly the lowest in the state. Snowpack percentages are the highest in the Lemhi basin at 67% of average, decrease to 55% in the Salmon basin above Salmon and South Fork Salmon basins, and to 50% in the Little and Middle Fork Salmon basins. Overall, the Salmon basin snowpack is 57% of average, slightly better than a year ago because last year's snowpack started melting earlier. Streamflow forecasts call for 50-60% of average for Salmon River tributaries and main Salmon River. May-July streamflow volumes for the Salmon River at White Bird should be better than in 2001 which had a volume of 45% of average, but less than 2004 which saw a runoff volume of 67%. The lack of mountain snow will provide a short, high water season on the Middle Fork Salmon River and streams will return to low flow levels earlier than normal, possibly to a gage height of 2.0 feet by early July. In low snow years like this, rain generated peaks may often exceed snowmelt generated peaks; this happened in 1991 and 1994. Additional rain during the snowmelt season and before the soils start drying will provide additional runoff. The potential for rain driven streamflow peaks remain until the soils start drying during the typical dry, summer season in Idaho.

SALMON RIVER BASIN
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
SALMON at Salmon (1)	MAY-JUL	315	400	440	58	480	565	760
	MAY-SEP	380	475	520	58	565	660	900
Lemhi River nr Lemhi	MAY-JUL	26	32	36	51	41	48	70
	MAY-SEP	35	43	48	54	54	63	89
MF Salmon at MF Lodge	MAY-JUL	300	369	415	59	461	530	700
	MAY-SEP	349	427	480	61	533	612	785
SALMON at White Bird (1)	MAY-JUL	2170	2700	2940	57	3180	3710	5150
	MAY-SEP	2430	3030	3300	57	3570	4170	5780

SALMON RIVER BASIN Reservoir Storage (1000 AF) - End of April					SALMON RIVER BASIN Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Salmon River ab Salmon	8	134	57
					Lemhi River	7	134	67
					Middle Fork Salmon River	3	107	49
					South Fork Salmon River	3	95	53
					Little Salmon River	4	95	52
					Salmon Basin Total	23	110	57

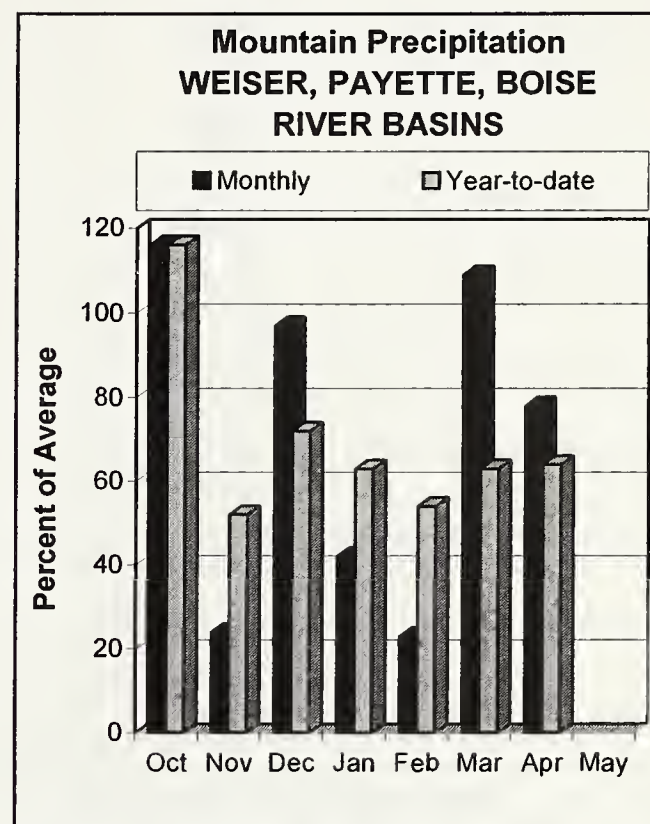
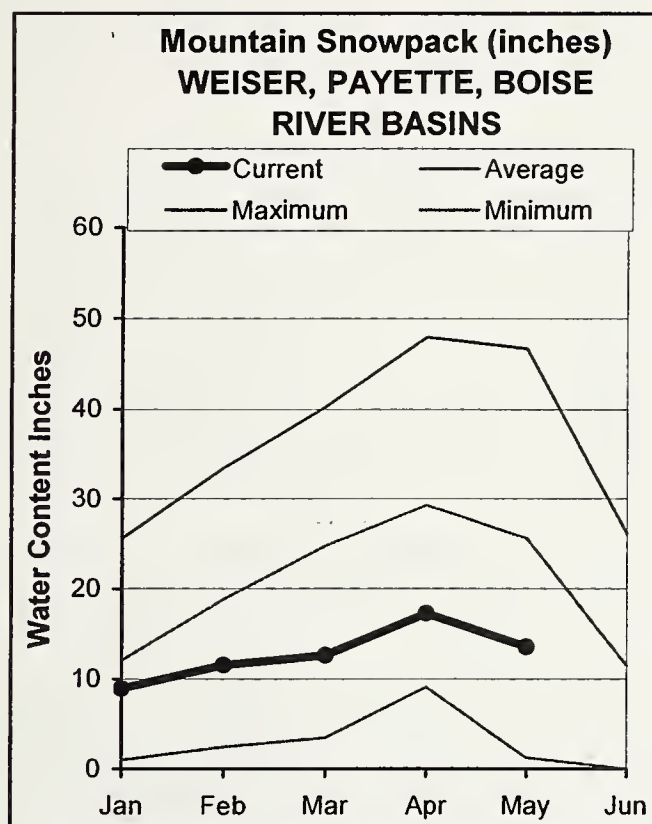
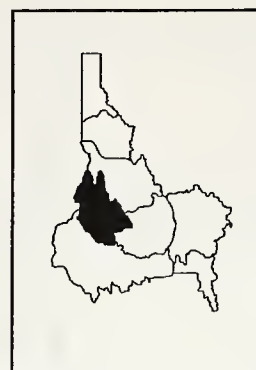
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The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

WEISER, PAYETTE, BOISE RIVER BASINS MAY 1, 2005



WATER SUPPLY OUTLOOK

April mountain precipitation seemed above average, but was only 78% of average. Water year to date precipitation is 64% of average, the lowest in the state. Snowpacks are about half of average in these west-central basins. Current snowpacks in the Payette and Boise basins are similar to a year ago; however, this year's peak is much less than last year's peak. Cool, wet weather since mid-March is delaying melt and bringing much needed moisture into the state, but is not adding much water to the snowpack to melt later this spring. The additional rainfall is just running through the snowpack. The Payette reservoir system is 76% full, same as last year, and 114% of average. The Boise reservoir system is 57% full, 83% of average and storing 200,000 acre-feet less than last year. The Boise River is forecast at 51% of average for the May-September period; slightly less than observed last year. Water supplies should be better than 2001, but shortages are still expected and will be more severe with a dry spring and summer. The Payette River at Horseshoe Bend is forecast at 45% of average, which is 350,000 acre-feet less than last year's observed runoff. Water supplies should be adequate, but natural stream levels will be low by summer's end. The Weiser River is forecast at 51% of average and last year's observed flows were 65% of average. Without much snow in the high country, reservoirs will be drafted earlier as demands start to exceed inflows; a cool, wet spring would stretch the limited water supply this year.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
WEISER near Weiser (1)	MAY-JUL	28	99	131	51	163	233	255
	MAY-SEP	37	112	146	51	181	256	285
SF PAYETTE at Lowman	MAY-JUL	158	183	200	53	215	240	380
	MAY-SEP	195	220	240	55	260	285	435
DEADWOOD RESERVOIR Inflow (1,2)	MAY-JUL	34	49	56	48	63	78	116
	MAY-SEP	37	53	60	48	67	83	125
LAKE FORK PAYETTE near McCall	MAY-JUL	35	41	45	59	49	55	76
	MAY-SEP	37	43	47	60	51	57	79
NF PAYETTE at Cascade (1,2)	MAY-JUL	89	155	185	47	215	280	395
	MAY-SEP	102	175	205	47	235	310	435
NF PAYETTE nr Banks (2)	MAY-JUL	126	190	230	46	270	335	505
	MAY-SEP	140	210	255	46	300	370	550
PAYETTE nr Horseshoe Bend (1,2)	MAY-JUL	335	505	580	45	655	825	1290
	MAY-SEP	380	560	645	45	730	910	1430
BOISE near Twin Springs (1)	MAY-JUL	200	260	285	56	310	370	510
	MAY-SEP	225	290	320	57	350	415	565
SF BOISE at Anderson Ranch Dam (1,2)	MAY-JUL	125	190	220	51	250	315	430
	MAY-SEP	139	210	240	52	270	340	465
MORES CREEK near Arrowrock Dam	MAY-JUL	11.0	22	30	38	38	49	79
	MAY-SEP	12.0	24	32	38	40	52	85
BOISE near Boise (1,2)	MAY-JUL	350	490	555	51	620	760	1080
	MAY-SEP	390	540	610	51	680	830	1190

WEISER, PAYETTE, BOISE RIVER BASINS
Reservoir Storage (1000 AF) - End of April

WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - May 1, 2005

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MANN CREEK	11.1	10.7	11.0	10.5	Mann Creek	1	224	61
CASCADE	693.2	557.9	537.6	462.5	Weiser River	3	218	55
DEADWOOD	161.9	87.9	107.5	103.4	North Fork Payette	5	93	54
ANDERSON RANCH	450.2	230.2	367.9	302.3	South Fork Payette	4	105	51
ARROWROCK	272.2	148.8	190.8	180.9	Payette Basin Total	10	99	54
LUCKY PEAK	293.2	196.4	223.4	207.9	Middle & North Fork Boise	5	103	53
LAKE LOWELL (DEER FLAT)	165.2	103.5	125.0	141.5	South Fork Boise River	7	110	56
					Mores Creek	3	83	50
					Boise Basin Total	12	103	53
					Canyon Creek	1	0	0

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

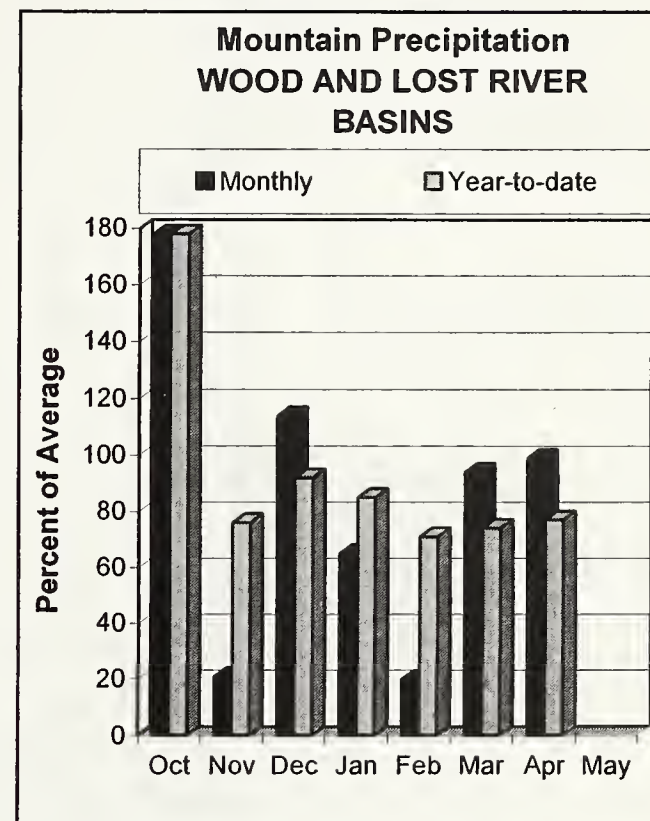
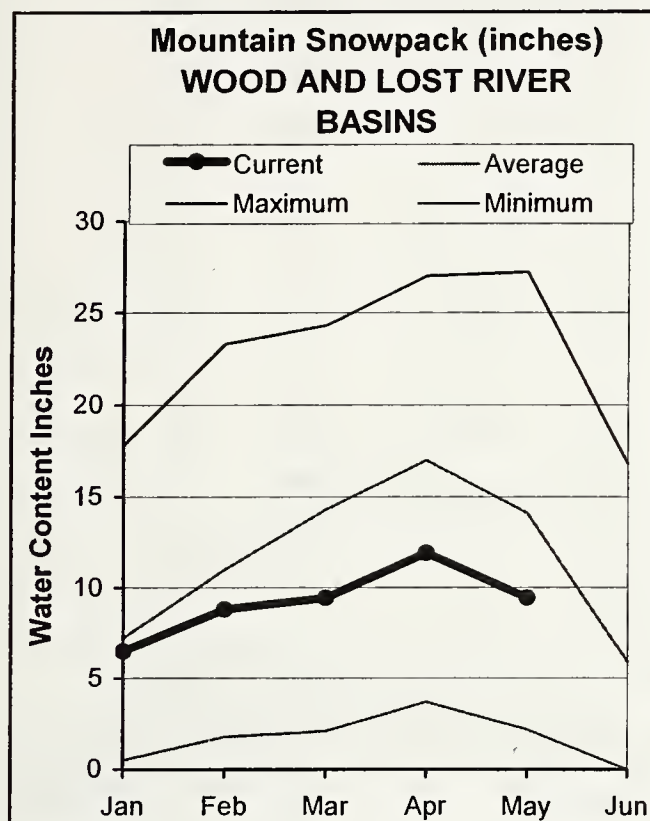
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WOOD and LOST RIVER BASINS

MAY 1, 2005



WATER SUPPLY OUTLOOK

April precipitation was average. Water year to date precipitation is 77% of average, which is just slightly less than last year. Snowpack percentages range from 60-80% of average in these central basins. Percentages may seem a little inflated because cool weather delayed the melt while averages are gradually decreasing since early April. Soil moisture is better this year from the timely rains last fall, but the snow water content peaked much lower this year. Lost-Wood Divide SNOTEL site currently has more snow than a year ago; it peaked at 19.1 inches March 16 last year, and at only 13.8 inches on April 9 this season. Magic Reservoir inflows were only 15% of average last year for May-September and are forecast at 26% of average this year. Little Wood River is forecast at 55% of average and should provide adequate supplies, similar to or better than those of 2000. The Big Lost River is forecast at 63% of average at Howell Ranch and decreases to 55% below Mackay Reservoir. Last year's flow was 38% of average and near record low below the dam. This year's forecast may be optimistic without spring rains as surface flows may be lost due to the tight groundwater connection in the basin. Users may wish to use a lesser chance of Exceedance Forecast to reduce risk of being water short. Streamflows are forecast at 17,900 acre-feet, 51% of average for the Little Lost River for May-September. This is slightly more than the record low of 14,000 acre-feet that flowed past the gage last year. If spring precipitation is below normal, water users should expect similar flows as the past few years because of the cumulative drought effects.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<===== Drier ===== Future Conditions ===== Wetter =====>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
BIG WOOD at Hailey (1)	MAY-JUL	64	92	106	47	121	158	225
	MAY-SEP	75	106	122	47	139	181	260
BIG WOOD ab Magic Reservoir	MAY-JUL	21	33	44	27	57	80	165
	MAY-SEP	32	43	50	28	75	113	179
CAMAS CREEK near Blaine	MAY-JUL	1.9	5.8	9.6	22	14.4	23	43
	MAY-SEP	2.1	6.2	10.1	23	15.0	24	44
BIG WOOD below Magic Dam (2)	MAY-JUL	34	46	54	26	84	128	205
	MAY-SEP	37	50	59	27	90	136	220
LITTLE WOOD R ab High Five Ck	MAY-JUL	21	27	32	55	37	45	58
	MAY-SEP	24	31	36	55	42	51	65
LITTLE WOOD near Carey (2)	MAY-JUL	16.0	27	34	55	41	52	62
	MAY-SEP	18.0	30	38	54	46	58	70
BIG LOST at Howell Ranch	MAY-JUL	74	91	102	63	113	130	162
	MAY-SEP	84	104	117	63	130	150	186
BIG LOST bl Mackay Reservoir	MAY-JUL	48	62	71	55	80	94	129
	MAY-SEP	68	82	91	57	100	114	159
LITTLE LOST bl Wet Creek	MAY-JUL	8.2	12.1	14.7	54	17.7	21	27
	MAY-SEP	9.5	14.9	17.9	51	21	26	35

WOOD AND LOST RIVER BASINS Reservoir Storage (1000 AF) - End of April					WOOD AND LOST RIVER BASINS Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of =====	
		This Year	Last Year	Avg			Last Yr	Average
MAGIC	191.5	55.1	76.1	150.4	Big Wood ab Hailey	7	123	62
LITTLE WOOD	30.0	28.7	29.5	24.3	Camas Creek	3	0	16
MACKAY	44.4	27.3	25.8	34.6	Big Wood Basin Total	10	127	58
					Fish Creek	0	0	0
					Little Wood River	4	277	82
					Big Lost River	4	160	71
					Little Lost River	3	175	64
					Birch-Medicine Lodge Cree	2	144	72
					Camas-Beaver Creeks	2	200	130

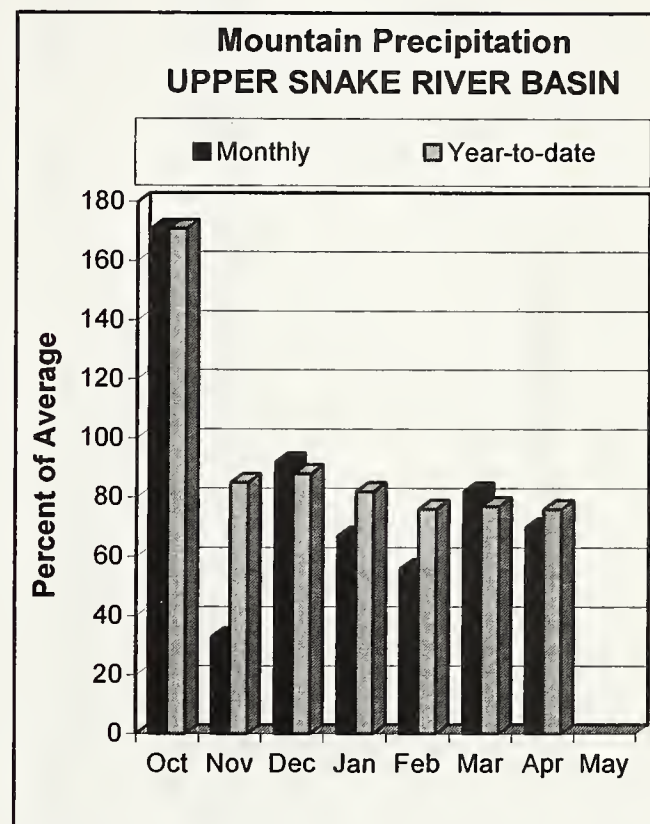
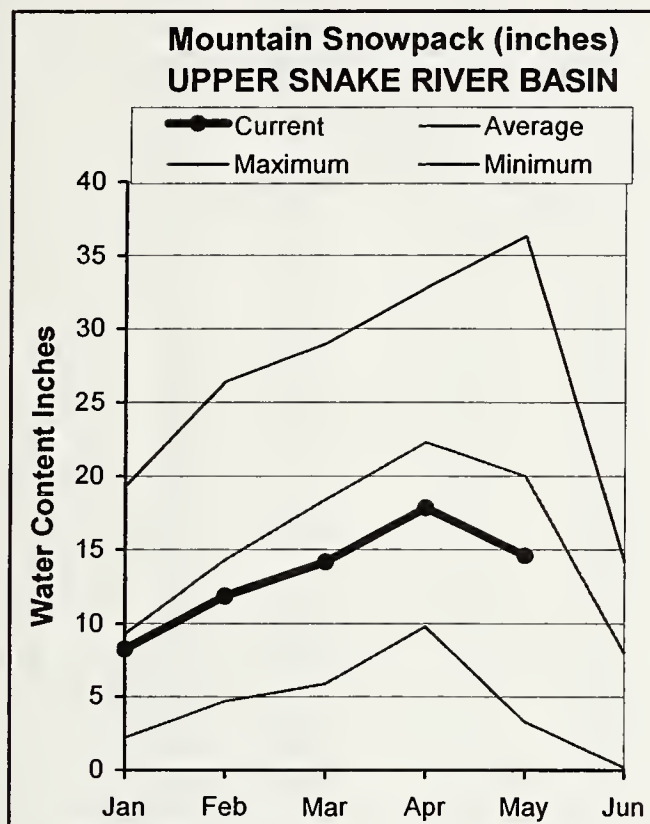
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The average is computed for the 1971-2000 base period.

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UPPER SNAKE RIVER BASIN

MAY 1, 2005



WATER SUPPLY OUTLOOK

Once again the Upper Snake basin missed the major storm track that brought average or better precipitation across southern Idaho in April and abundant moisture in late March to northern Idaho. April precipitation was only 30-40% of average at key SNOTEL sites in Yellowstone National Park that provide the source of water for the Snake River. Overall, April precipitation in the Upper Snake basin was 70% of average, the lowest in the state. Water year to date is 76% of average, about 10 percent less than last year. Snowpacks are the lowest in the Snake River above Jackson Lake at 58% of average, and are about 65% elsewhere in the Upper Snake and Henrys Fork basins. The Greys and Salt basins are 73% of average, but do not provide as much streamflow as the main Snake River. Mid-elevation snow is melting or nearly melted in Willow and Blackfoot basins which are 54% and 22% of average, respectively. Jackson and Palisades combined reservoir storage is 47% full, 79% of average. Snake River near Heise is forecast at 60% of average. Based on these storage levels and streamflow forecasts, surface water supplies should be similar to 2002, but better than 2001. The Henrys Fork is forecast at 70% of average. The May-July forecast for the Teton River near Driggs is for 55% of average, 78,000 acre-feet. This is 13,000 acre-feet less than last year, but greater than the 48,400 acre-feet that occurred in 2001. The May-July minimum is 46,000 acre-feet in 1977. Blackfoot Reservoir is 20% full, 28% of average, and about the same as a year ago. American Falls Reservoir is 88% full, which is average and better than a year ago. With the lack of snow in the high country, streams will return to below normal baseflows earlier than normal. Water users should plan accordingly based on their water use.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - May 1, 2005

		<<===== Drier ===== Future Conditions ===== Wetter =====>						
Forecast Point	Forecast Period	Chance Of Exceeding *						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
HENRYS FORK near Ashton (2)	MAY-JUL	225	270	300	67	330	375	450
	MAY-SEP	360	415	450	70	485	540	645
HENRYS FORK near Rexburg (2)	MAY-JUL	775	880	950	71	1020	1120	1330
	MAY-SEP	1070	1190	1270	71	1350	1470	1780
FALLS RIVER nr Ashton (2)	MAY-JUL	156	190	210	63	230	265	335
	MAY-SEP	190	230	255	63	280	320	405
TETON RIVER NEAR DRIGGS	MAY-JUL	53	68	78	55	88	103	143
	MAY-SEP	74	93	105	56	117	136	188
TETON near St. Anthony	MAY-JUL	170	200	220	62	240	270	355
	MAY-SEP	210	245	270	62	295	330	435
SNAKE at Flagg Ranch	MAY-JUL	220	245	265	62	285	310	425
	MAY-SEP	245	275	295	62	315	345	475
SNAKE nr Moran (1,2)	MAY-JUL	340	420	455	61	490	570	750
	MAY-SEP	385	470	510	61	550	635	840
PACIFIC CREEK at Moran	MAY-JUL	58	74	85	53	96	112	160
	MAY-SEP	64	81	92	55	103	120	167
SNAKE ab resv nr Alpine (1,2)	MAY-JUL	1000	1180	1260	58	1340	1520	2160
	MAY-SEP	1170	1380	1480	59	1580	1790	2530
GREYS above Palisades	MAY-JUL	170	190	205	68	220	240	300
	MAY-SEP	205	230	245	69	260	285	355
SALT near Etna	MAY-JUL	126	160	183	65	208	238	280
	MAY-SEP	170	210	235	65	260	300	360
SNAKE nr Irwin (1,2)	MAY-JUL	1390	1660	1790	60	1920	2190	2980
	MAY-SEP	1650	1970	2110	60	2250	2570	3520
SNAKE near Heise (2)	MAY-JUL	1550	1750	1890	60	2030	2230	3170
	MAY-SEP	1850	2080	2240	60	2400	2630	3760
WILLOW CREEK nr Ririe (2)	MAY-JUL	12.1	16.6	20	33	24	30	60
BLACKFOOT RESV INFLOW	MAY-JUN	8.9	24	35	41	46	61	86
SNAKE nr Blackfoot (1,2)	MAY-JUL	1710	2170	2370	57	2570	3030	4130
	MAY-SEP	2290	2750	2950	57	3150	3610	5140
PORTNEUF at Topaz	MAY-JUL	27	34	39	60	44	51	65
	MAY-SEP	42	47	51	61	55	60	84
AMERICAN FALLS RESV INFLOW (1,2)	MAY-JUL	297	469	585	22	885	1535	2640
	MAY-SEP	387	559	675	23	975	1625	2910

UPPER SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of April					UPPER SNAKE RIVER BASIN Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HENRYS LAKE	90.4	72.7	73.3	87.4	Henrys Fork-Falls River	9	100	67
ISLAND PARK	135.2	112.7	114.3	123.2	Teton River	7	102	64
GRASSY LAKE	15.2	9.4	10.5	12.7	Henrys Fork above Rexburg	16	100	66
JACKSON LAKE	847.0	201.0	259.6	471.1	Snake above Jackson Lake	6	100	58
PALISADES	1400.0	849.1	710.4	862.6	Gros Ventre River	3	112	66
RIRIE	80.5	46.9	44.5	56.2	Hoback River	5	117	63
BLACKFOOT	348.7	71.0	61.6	256.3	Greys River	5	122	75
AMERICAN FALLS	1672.6	1472.0	1163.2	1493.8	Salt River	5	176	71
					Snake above Palisades	23	119	65
					Willow Creek	7	106	54
					Blackfoot River	3	0	22
					Portneuf River	6	271	94
					Snake abv American Falls	41	123	68

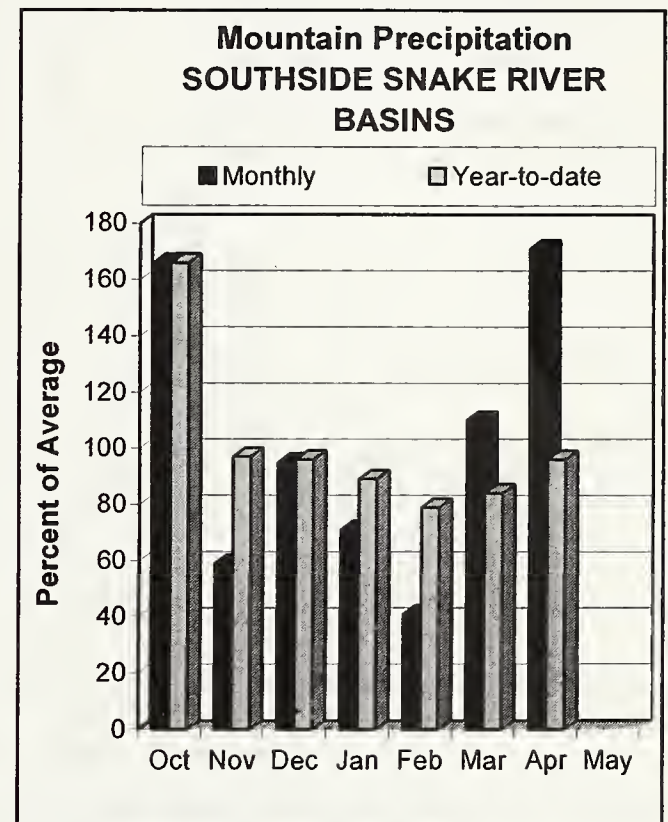
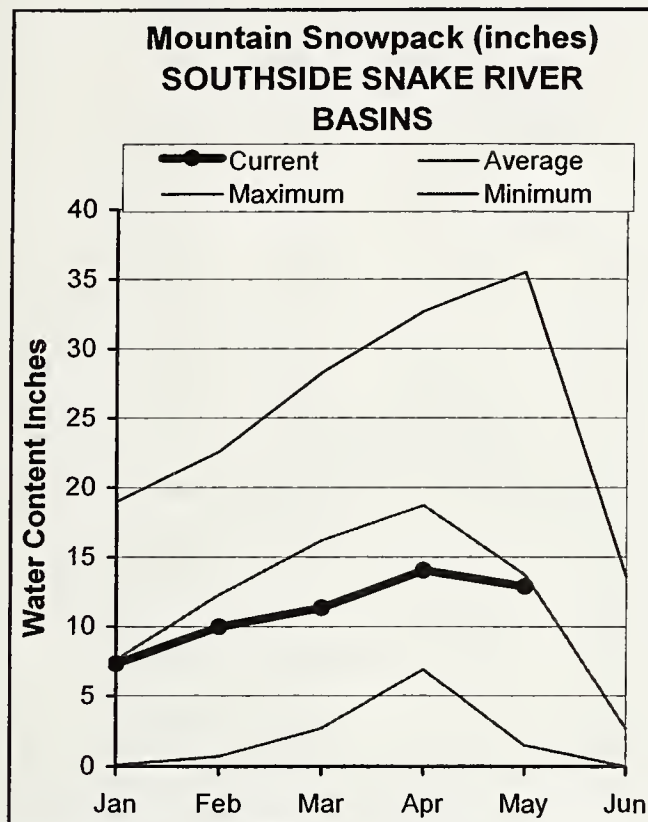
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SOUTHSIDE SNAKE RIVER BASINS MAY 1, 2005



WATER SUPPLY OUTLOOK

Basins south of the Snake River capitalized again on Mother Nature's storm track bringing moisture south of the Idaho border. April precipitation was 171% of average in these high desert basins with amounts ranging from 120% of average in the Idaho portion of the Owyhee basin to 250% in the Owyhee headwaters in Nevada. Even Hollister received 4.2 inches in April, which is the greatest April amount in the 88 year data record; previous maximum was 3.56 inches in April 1944, average is 0.95 inches. As a result of the good precipitation, streams jumped with the Owyhee River near Rome peaking over 10,000 cfs, Bruneau River near Hot Springs had dual peaks of 2,000 cfs, and Salmon Falls Creek peaked April 29 at 761 cfs. As the precipitation ceased, the streams decreased. May 1 snowpacks are average for the Raft, Oakley, Salmon Falls and Bruneau basins and below average in the Owyhee basin. Owyhee Reservoir jumped to 48% full, 55% of average; Salmon Falls Reservoir is 22% full, same as a year ago at 45% of average; and Oakley Reservoir is 33% full. Streamflow forecasts improved with Oakley Reservoir inflow now forecast at 70% of average, Salmon Falls Creek at 77%, and Bruneau River at 79%. The Owyhee headwaters are forecast at average for the Owyhee River near Owyhee, Nevada, 60% near Rome and for the reservoir inflow. Irrigators for Oakley and Salmon Falls reservoirs should see the best water supply since 2000. There is still enough snow to produce additional snowmelt streamflow peaks in the Bruneau, Salmon Falls and Goose basins. Magnitude, timing and if previous peaks are exceeded depends upon future precipitation and how the remaining snow melts. Unsettled weather and more rain in early to mid-May could provide another added bonus and bump-up the streams again for farmers, river runners and other water users.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<===== Drier ===== Future Conditions ===== Wetter =====>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
OAKLEY RESERVOIR INFLOW	MAY-JUL	9.4	12.3	14.6	70	17.0	21	21
	MAY-SEP	11.2	14.3	16.7	70	19.3	23	24
SALMON FALLS CREEK nr San Jacinto	MAY-JUL	29	38	44	77	50	60	57
	MAY-SEP	32	42	48	77	54	64	62
BRUNEAU near Hot Spring	MAY-JUL	83	109	128	79	149	182	162
	MAY-SEP	89	116	136	79	158	192	173
OWYHEE near Gold Creek (2)	MAY-JUL	2.3	5.6	8.6	72	12.3	18.9	12.0
	MAY-SEP	2.5	5.7	8.7	81	12.3	18.8	10.7
OWYHEE nr Owyhee (2)	MAY-JUL	25	41	51	102	61	77	50
OWYHEE near Rome	MAY-JUL	58	95	125	60	159	217	210
	MAY-SEP	71	110	142	62	178	237	230
OWYHEE RESV INFLOW (2)	MAY-JUL	68	106	136	60	170	227	225
	MAY-SEP	83	123	154	60	189	247	255
SUCCOR CK nr Jordan Valley	MAY-JUL	1.8	2.7	3.4	48	5.2	7.8	7.1
SNAKE RIVER at King Hill (1,2)	MAY-JUL	126	734	1010	50	1285	1895	2040
SNAKE RIVER near Murphy (1,2)	MAY-JUL	185	828	1120	52	1410	2055	2150
SNAKE RIVER at Weiser (1,2)	MAY-JUL	199	1051	1540	39	2030	3110	3980
SNAKE RIVER at Hells Canyon Dam (1,2	MAY-JUL	225	1137	1680	37	2225	3420	4520
SNAKE blw Lower Granite Dam (1,2)	MAY-JUL	5760	8022	9050	54	10080	12340	16700
	MAY-SEP	6695	9312	10500	54	11690	14300	19300

SOUTHSIDE SNAKE RIVER BASINS Reservoir Storage (1000 AF) - End of April					SOUTHSIDE SNAKE RIVER BASINS Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** This Year	Usable Last Year	Storage *** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr Average	
OAKLEY	75.6	24.6	20.1	41.0	Raft River	1	120	99
SALMON FALLS	182.6	39.4	41.1	87.9	Goose-Trapper Creeks	4	164	99
WILDHORSE RESERVOIR	71.5	31.5	28.0	55.8	Salmon Falls Creek	7	183	102
OWYHEE	715.0	340.2	416.6	613.6	Bruneau River	5	193	100
BROWNLEE	1420.0	1391.4	1327.9	1069.2	Owyhee Basin Total	7	250	87

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

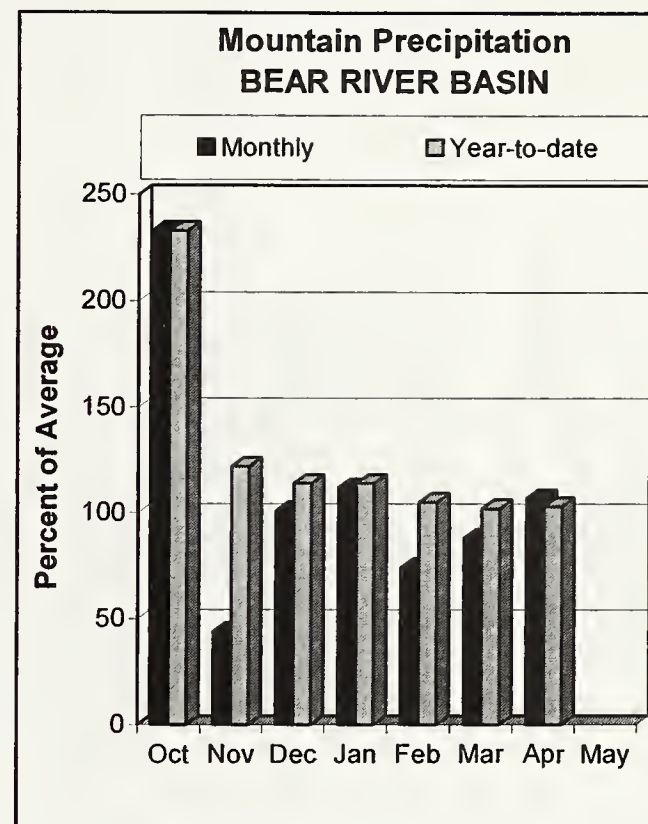
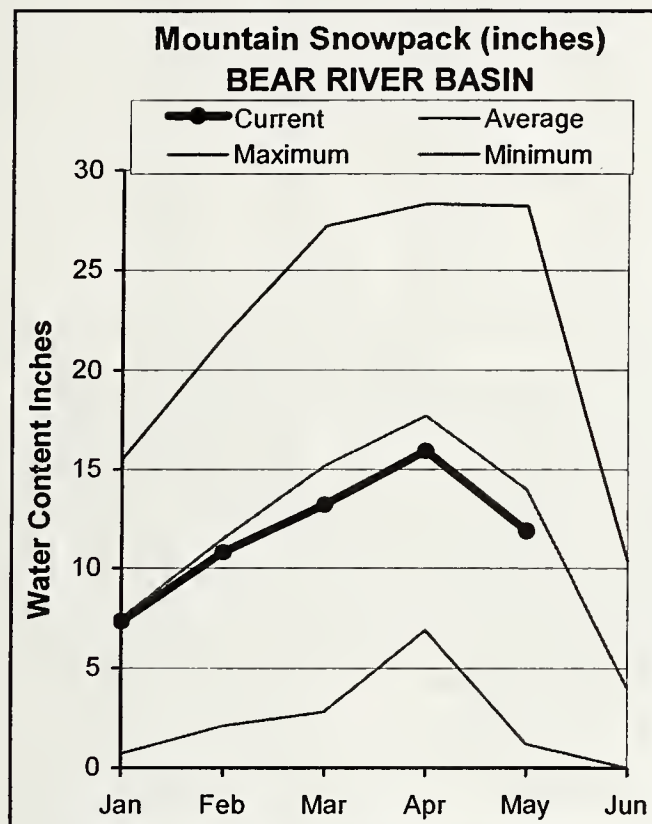
The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

BEAR RIVER BASIN

MAY 1, 2005



WATER SUPPLY OUTLOOK

April precipitation amounts ranged from 60 to 160% of average at the 15 SNOTEL sites in the basin. Overall, April precipitation was 107% of average. Water year to date precipitation is 103% of average, about 30% more than a year ago. Snow water content amounts are about average for May 1, twice last year's values, and highest since 1999. Streamflow for the Bear River at Stewart Dam was just above average last month at 54,000 acre-feet, average April volume is 47,200 acre-feet. This is the first time flow has been above average since December 1999 and the greatest monthly volume since July 1999 when 59,800 acre-feet passed the gage. Bear Lake storage increased to 246,000 acre-feet by the end of April, 26,000 more than a year ago. The low reservoir storage still reflects the eight-year drought that has gripped the region with below average snowpacks. Headwater streams in Utah are forecast at 110% of average; Smiths Fork is forecast at 88% of average. Bear River at Stewart Dam is forecast at 45% of average for the May-July period. Water supplies will be better than last year for those that rely on natural streamflow volumes. Bear Lake water users should also see better water supplies than last year, but allotments will be less than a full amount with Bear Lake storage so low.

BEAR RIVER BASIN
Streamflow Forecasts - May 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Bear River nr UT-WY State Line	APR-SEP	120	129	136	109	143	152	125
	MAY-SEP	112	121	128	108	135	144	119
Bear River ab Reservoir nr Woodruff	APR-SEP	124	142	155	109	168	186	142
	MAY-SEP	113	130	142	116	154	171	122
Smiths Fork nr Border	APR-JUL	83	88	91	88	94	99	103
	APR-SEP	92	98	102	84	106	112	121
	MAY-JUL	65	70	73	77	76	81	95
Bear River at Stewart Dam	APR-JUL	94	117	136	58	154	185	234
	APR-SEP	107	134	154	59	175	209	262
	MAY-JUL	43	65	84	45	102	134	186
	MAY-SEP	56	81	102	48	122	156	214

BEAR RIVER BASIN Reservoir Storage (1000 AF) - End of April					BEAR RIVER BASIN Watershed Snowpack Analysis - May 1, 2005			
Reservoir	Usable Capacity	*** This Year	Usable Last Year	Storage *** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	% of Average
BEAR LAKE	1421.0	246.0	220.4	971.0	Smiths & Thomas Forks	4	157	94
MONTPELIER CREEK	4.0	3.5	2.2	2.5	Bear River ab WY-ID line	13	204	98
					Montpelier Creek	1	0	0
					Mink Creek	1	296	86
					Cub River	1	219	112
					Bear River ab ID-UT line	19	222	95
					Malad River	1	0	0

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

Streamflow Adjustment List for All Forecasts Published in Idaho Water Supply Outlook Report: streamflow forecasts are projections of runoff volumes that would occur without influences from upstream reservoirs or diversions. These values are referred to as natural or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and inter-basin transfers are added or subtracted from the observed (actual) streamflow volumes. The following list documents the adjustments made for each forecast point. (Revised Dec. 2004).

Panhandle River Basins

Kootenai R at Leonia, ID

+ Lake Koocanusa (Storage Change)

Boundary Ck nr Porthill, ID – No Corrections

Moyie R at Eastport, ID – No Corrections

Smith Creek nr Porthill, ID – No Corrections

Clark Fork R at Whitehorse Rapids, ID

+ Hungry Horse (Storage Change)

+ Flathead Lake (Storage Change)

+ Noxon Rapids Resv (Storage Change)

Pend Oreille Lake Inflow, ID

+ Pend Oreille R at Newport, WA

+ Hungry Horse (Storage Change)

+ Flathead Lake (Storage Change)

+ Noxon Rapids (Storage Change)

+ Pend Oreille Lake (Storage Change)

+ Priest Lake (Storage Change)

Priest R nr Priest R, ID

+ Priest Lake (Storage Change)

NF Coeur d'Alene R at Enaville, ID - No Corrections

St. Joe R at Calder, ID - No Corrections

Spokane R nr Post Falls, ID

+ Coeur d'Alene Lake (Storage Change)

Spokane R at Long Lake, WA

+ Coeur d'Alene Lake (Storage Change)

+ Long Lake, WA (Storage Change)

Clearwater River Basin

Selway R nr Lowell - No Corrections

Lochsa R nr Lowell - No Corrections

Dworshak Resv Inflow, ID

+ Clearwater R nr Peck, ID

- Clearwater R at Orofino, ID

+ Dworshak Resv (Storage Change)

Clearwater R at Orofino, ID - No Corrections

Clearwater R at Spalding, ID

+ Dworshak Resv (Storage Change)

Salmon River Basin

Salmon R at Salmon, ID - No Corrections

Lemhi R nr Lemhi, ID – No Corrections

MF Salmon R at MF Lodge, ID – No Corrections

Salmon R at White Bird, ID - No Corrections

Weiser, Payette, Boise River Basins

Weiser R nr Weiser, ID - No Corrections

SF Payette R at Lowman, ID - No Corrections

Deadwood Resv Inflow, ID

+ Deadwood R blw Deadwood Resv nr Lowman

+ Deadwood Resv (Storage Change)

Lake Fork Payette R nr McCall, ID – No Corrections

NF Payette R at Cascade, ID

+ Cascade Resv (Storage Change)

+ Payette Lake (Storage Change)

NF Payette R nr Banks, ID

+ Cascade Resv (Storage Change)

+ Payette Lake (Storage Change)

Payette R nr Horseshoe Bend, ID

+ Cascade Resv (Storage Change)

+ Deadwood Resv (Storage Change)

+ Payette Lake (Storage Change)

Boise R nr Twin Springs, ID - No Corrections

SF Boise R at Anderson Ranch Dam, ID

+ Anderson Ranch Resv (Storage Change)

Boise R nr Boise, ID

+ Anderson Ranch Resv (Storage Change)

+ Arrowrock Resv (Storage Change)

+ Lucky Peak Resv (Storage Change)

Wood and Lost River Basins

Big Wood R at Hailey, ID - No Corrections

Big Wood R abv Magic Resv, ID

+ Big Wood R nr Bellevue, ID

+ Willow Ck

Camas Ck nr Blaine – No Corrections

Big Wood R blw Magic Dam nr Richfield, ID

+ Magic Resv (Storage Change)

Little Wood R abv High Five Ck, ID – No Corrections

Little Wood R nr Carey, ID

+ Little Wood Resv (Storage Change)

Big Lost R at Howell Ranch, ID - No Corrections

Big Lost R blw Mackay Resv nr Mackay, ID

+ Mackay Resv (Storage Change)

Little Lost R blw Wet Ck nr Howe, ID - No Corrections

Upper Snake River Basin

Henrys Fork nr Ashton, ID

+ Henrys Lake (Storage Change)

+ Island Park Resv (Storage Change)

Henrys Fork nr Rexburg, ID

+ Henrys Lake (Storage Change)

+ Island Park Resv (Storage Change)

+ Grassy Lake (Storage Change)

+ Diversions from Henrys Fk btw Ashton to St. Anthony, ID

+ Diversions from Henrys Fk btw St. Anthony to Rexburg, ID

+ Diversions from Falls R abv nr Ashton, ID

+ Diversions from Falls R nr Ashton to Chester, ID

Falls R nr Ashton, ID

+ Grassy Lake (Storage Change)

+ Diversions from Falls R abv nr Ashton, ID

Teton R nr Driggs, ID - No Corrections

Teton R nr St. Anthony, ID

- Cross Cut Canal into Teton R

+ Sum of Diversions for Teton R abv St. Anthony, ID

Snake R nr Moran, WY

+ Jackson Lake (Storage Change)
 Pacific Ck at Moran, WY – No Corrections
 Snake R abv Palisades, WY
 + Jackson Lake (Storage Change)
 Greys R abv Palisades, WY – No Corrections
 Salt R abv Palisades, WY – No Corrections
 Palisades Resv Inflow, ID
 + Snake R nr Irwin, ID
 + Jackson Lake (Storage Change)
 + Palisades Resv (Storage Change)
 Snake R nr Heise, ID
 + Jackson Lake (Storage Change)
 + Palisades Resv (Storage Change)
 Willow Ck nr Ririe, ID
 + Ririe Resv (Storage Change)
 Blackfoot Reservoir Inflow, ID
 + Blackfoot R
 + Blackfoot Resv (Storage Change)
 Snake R nr Blackfoot, ID
 + Palisades Resv (Storage Change)
 + Jackson Lake (Storage Change)
 + Diversions from Snake R btw Heise and Shelly
 + Diversions from Snake R btw Shelly and Blackfoot
 Portneuf R at Topaz, ID - No Corrections
 American Falls Resv Inflow, ID
 + Snake River at Neeley
 + All Corrections Made for Henrys Fk nr Rexburg, ID
 + Jackson Lake (Storage Change)
 + Palisades Resv (Storage Change)
 + Diversions from Snake R btw Heise and Shelly
 + Diversions from Snake R btw Shelly and Blackfoot

Southside Snake River Basins
 Oakley Resv Inflow, ID
 + Goose Ck abv Trapper Ck
 + Trapper Ck nr Oakley
 Salmon Falls Ck nr San Jacinto, NV - No Corrections
 Bruneau R nr Hot Springs, ID - No Corrections
 Owyhee R nr Gold Ck, NV
 + Wildhorse Resv (Storage Change)
 Owyhee R nr Owyhee, NV
 + Wildhorse Resv (Storage Change)
 Owyhee R nr Rome, OR – No Corrections
 Owyhee Resv Inflow, OR
 + Owyhee R blw Owyhee Dam, OR
 + Owyhee Resv (Storage Change)
 + Diversions to North and South Canals
 Succor Ck nr Jordan Valley, OR - No Corrections
 Snake R at King Hill, ID - No Corrections
 Snake R nr Murphy, ID - No Corrections
 Snake R at Weiser, ID - No Corrections
 Snake R at Hells Canyon Dam, ID
 + Brownlee Resv (Storage Change)

Bear River Basin

Bear R nr UT-WY Stateline, UT – No Corrections
 Bear R abv Resv nr Woodruff, UT – No Corrections

Smiths Fork nr Border, WY - No Corrections
 Bear R blw Stewart Dam nr Montpelier, ID
 + Bear R blw Stewart Dam
 + Rainbow Inlet Canal

Reservoir Capacity Definitions (Units In 1,000 Acre-Feet, KAF)

Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. This table lists these volumes for each reservoir, and defines the storage volumes NRCS uses when reporting capacity and current reservoir storage. In most cases, NRCS reports usable storage, which includes active and inactive storage. (Revised December 2004)

Basin/ Reservoir	Dead Storage	Inactive Storage	Active Storage	Surcharge Storage	Nrcs Capacity	Nrcs Capacity Includes
<u>Panhandle Region</u>						
Hungry Horse	39.73	--	3451.00	--	3451.0	Active
Flathead Lake	Unknown	--	1791.00	--	1971.0	Active
Noxon Rapids	Unknown	--	335.00	--	335.0	Active
Pend Oreille	406.20	112.40	1042.70	--	1561.3	Dead+Inactive+Active
Coeur d'Alene	--	13.50	225.00	--	238.5	Inactive+Active
Priest Lake	20.00	28.00	71.30	--	119.3	Dead+Inactive+Active
<u>Clearwater Basin</u>						
Dworshak	--	1452.00	2016.00	--	3468.0	Inactive+Active
<u>Weiser/Boise/Payette Basins</u>						
Mann Creek	1.61	0.24	11.10	--	11.1	Active
Cascade	--	46.70	646.50	--	693.2	Inactive+Active
Deadwood	--	--	161.90	--	161.9	Active
Anderson Ranch	24.90	37.00	413.10	--	450.1	Inactive+Active
Arrowrock	--	--	272.20	--	272.2	Active
Lucky Peak	--	28.80	264.40	13.80	293.2	Inactive+Active
Lake Lowell	7.90	5.80	159.40	--	165.2	Inactive+Active
<u>Wood/Lost Basins</u>						
Magic	Unknown	--	191.50	--	191.5	Active
Little Wood	--	--	30.00	--	30.0	Active
Mackay	0.13	--	44.37	--	44.4	Active
<u>Upper Snake Basin</u>						
Henrys Lake	--	--	90.40	--	90.4	Active
Island Park	0.40	--	127.30	7.90	135.2	Active+Surcharge
Grassy Lake	--	--	15.18	--	15.2	Active
Jackson Lake	Unknown	--	847.00	--	847.0	Active
Palisades	44.10	155.50	1200.00	--	1400.0	Dead+Inactive+Active
Ririe	4.00	6.00	80.54	10.00	80.5	Active
Blackfoot	--	--	348.73	--	348.7	Active
American Falls	--	--	1672.60	--	1672.6	Active
<u>Southside Snake Basins</u>						
Oakley	0	--	75.60	--	75.6	Active
Salmon Falls	48.00	5.0	182.65	--	182.6	Active+Inactive
Wildhorse	--	--	71.50	--	71.5	Active
Owyhee	406.83	--	715.00	--	715.0	Active
Brownlee	0.45	444.70	975.30	--	1420.0	Inactive+Active
<u>Bear River Basin</u>						
Bear Lake	5.0maf	--	1421.00	--	1421.0	Active-includes 119 that can be active
Montpelier Creek	0.21	--	3.84	--	4.0	Dead+Active

Interpreting Streamflow Forecasts

Introduction

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

Most Probable (50 Percent Chance of Exceeding) Forecast. This forecast is the best estimate of streamflow volume that can be produced given current conditions and based on the outcome of similar past situations. There is a 50 percent chance that the streamflow volume will exceed this forecast value. There is a 50 percent chance that the streamflow volume will be less than this forecast value.

The most probable forecast will rarely be exactly right, due to errors resulting from future weather conditions and the forecast equation itself. This does not mean that users should not use the most probable forecast; it means that they need to evaluate existing circumstances and determine the amount of risk they are willing to take by accepting this forecast value.

To Decrease the Chance of Having Too Little Water

If users want to make sure there is enough water available for their operations, they might determine that a 50 percent chance of the streamflow volume being lower than the most probable forecast is too much risk to take. To reduce the risk of not having enough water available during the forecast period, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded (or possibly some point in-between). These include:

70 Percent Chance of Exceeding Forecast. There is a 70 percent chance that the streamflow volume will exceed this forecast value.

There is a 30 percent chance the streamflow volume will be less than this forecast value.

90 Percent Chance of Exceeding Forecast. There is a 90 percent chance that the streamflow volume will exceed this forecast value.

There is a 10 percent chance the streamflow volume will be less than this forecast value.

To Decrease the Chance of Having Too Much Water

If users want to make sure they don't have too much water, they might determine that a 50 percent chance of the streamflow being higher than the most probable forecast is too much of a risk to take. To reduce the risk of having

too much water available during the forecast period, users can base their operational decisions on one of the forecasts with a smaller chance of being exceeded. These include:

30 Percent Chance of Exceeding Forecast. There is a 30 percent chance that the streamflow volume will exceed this forecast value. There is a 70 percent chance the streamflow volume will be less than this forecast value.

10 Percent Chance of Exceeding Forecast. There is a 10 percent chance that the streamflow volume will exceed this forecast value. There is a 90 percent chance the streamflow volume will be less than this forecast value.

Using the forecasts - an example

Using the Most Probable Forecast. Using the example forecasts shown below, users can reasonably expect 36,000 acre-feet to flow past the gaging station on the Mary's River near Death between March 1 and July 31.

Using the Higher Exceedence Forecasts. If users anticipate a somewhat drier trend in the future (monthly and seasonal weather outlooks are available from the National Weather Service every two weeks), or if they are operating at a level where an unexpected shortage of water could cause problems, they might want to plan on receiving only 20,000 acre-feet (from the 70 percent chance of exceeding forecast). In seven out of ten years with similar conditions, streamflow volumes will exceed the 20,000 acre-foot forecast.

If users anticipate extremely dry conditions for the remainder of the season, or if they determine the risk of using the 70 percent chance of exceeding forecast is too great, then they might plan on receiving only 5000 acre-feet (from the 90 percent chance of exceeding forecast). Nine out of ten years with similar conditions, streamflow volumes will exceed the 5000 acre-foot forecast.

Using the Lower Exceedence Forecasts. If users expect wetter future conditions, or if the chance that five out of every ten years with similar conditions would produce streamflow volumes greater than 36,000 acre-feet was more than they would like to risk, they might plan on receiving 52,000 acre-feet (from the 30 percent chance of exceeding forecast) to minimize potential flooding problems. Three Out of ten years with similar conditions, streamflows will exceed the 52,000 acre-foot forecast.

In years when users expect extremely wet conditions for the remainder of the season and the threat of severe flooding and downstream damage exists, they might choose to use the 76,000 acre-foot (10 percent chance of exceeding) forecast for their water management operations. Streamflow volumes will exceed this level only one year out of ten.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
SF PAYETTE RIVER at Lowman	APR-JUL	329	414	471	109	528	613	432
	APR-SEP	369	459	521	107	583	673	488
BOISE RIVER near Twin Springs (1)	APR-JUL	443	610	685	109	760	927	631
	APR-SEP	495	670	750	109	830	1005	

For more information concerning streamflow forecasting ask your local NRCS field office for a copy of "A Field Office Guide for Interpreting Streamflow Forecasts" or visit our Web page.

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